

## **REMARKS**

### **AMENDMENTS TO THE SPECIFICATION**

The title of Example 4 on page 224, line 12 was amended to correct a grammatical error by deleting the phrase “potassium channel modulatory beta” and replacing it with the phrase “glycine receptor alpha” to recognize that the HGRA4 polypeptide is a glycine receptor alpha subunit. The title of Example 4 was further amended to append a coma (“,”) after the term “subunit”. Support for this amendment may be found on page 13 of the instant specification, as well as throughout the specification as originally filed. No new matter has been added.

## **STATUS OF THE CLAIMS:**

Claims 28, 29, 37, 38, 39, and 40 were cancelled.

Claims 20 and 30 were amended.

Claims 20 to 27, and Claims 30 to 36 are pending.

Claim 20 was amended to delete clause (e). Applicants reserve the right to prosecute Claim 20(e) as originally presented in related applications. Applicants right to equivalents of Claim 20 is reserved. No new matter has been added.

Claim 20 was further amended to change the recited clause “(f)” to clause “(e)” in order to place it in its proper alphabetical context in consideration of the deletion of clause (e) described supra. In addition, the new clause (e) was amended to delete the phrase “, or (e)”, as well as to append the term “ or” in between “(c)” and “(d)” in recognition of the deletion of clause (e) described supra. No new matter has been added.

Claim 30 was amended to change clause “(f)” to “(e)” in consideration of the deletion of clause (e) in Claim 20 described supra. Applicants assert that this amendment was not made to overcome any issues related to the patentability of this claim. Applicants reserve the right to prosecute Claim 30 as originally presented in related applications. Applicants right to equivalents of Claim 30 is reserved. No new matter has been added.

**I. Rejections under 35 U.S.C. § 112, First Paragraph**

a. The Examiner has rejected claims 20 to 40 under 35 U.S.C. § 112, first paragraph. More particularly, the Examiner alleges that “the specification, while being enabling for claims limited in scope to an isolated nucleic acid of SEQ ID NO:3, and an isolated nucleic acid encoding SEQ ID NO:4, does not reasonably provide enablement for claims to an isolated nucleic acid encoding at least 225 or amino acids of SEQ ID NO:4, which has glycine receptor activity (claim 20, part (e), claims 28 and 29, for example), or an isolated nucleic acid at least 97% identical to the above nucleotide sequences (claim 37, for example). The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims.”

Applicants disagree and assert that one skilled in the art would readily appreciate how to make and use the invention based upon the teachings of Applicants specification, and in conjunction with knowledge in the art. Specifically, Applicants specification provides the requisite teachings a skilled artisan could utilize to assess whether the polynucleotides embraced by Claim 20(e), 28, 29, and 37 encode a polypeptide that has glycine receptor activity (see Example 6). However, in the interest of facilitating prosecution, Applicants have deleted clause (e) from Claim 20, cancelled its dependent Claims 28 and 29, and cancelled Claim 37 as well as its dependent Claims 38, 39, and 40. Applicants believe the Examiners rejections of Claims 20(e), 28, 29, 37, 38, 39, and 40 have been rendered moot in consideration of these amendments and claim cancellations. Moreover, Applicants believe the Examiners rejections of the remaining claims has also been rendered moot in consideration of these amendments and claim cancellations.

**II. Rejections under 35 U.S.C. § 112, first paragraph**

a. The Examiner has rejected Claim 37 under 35 U.S.C. § 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. More particularly, the Examiner has rejected Claim 37 alleging that “In the absence of a specific known activity of said glycine receptor subunit, the claimed polynucleotide variants do not meet the written description provision of 35 U.S.C. § 112, first paragraph”.

Applicants disagree with the Examiners allegation and point out again that the instant specification clearly, and unambiguously, discloses numerous species that fall within the 97% identity limitation of this claim as discussed in Applicants February 19, 2004 communication. For example, Applicants specification discloses N- and C-terminal deletion mutants of the HGRA4sv polypeptide, several of which would fall within the scope of the 97% limitation (see pages 48-53). Moreover, Applicants specification also provides the requisite teachings a skilled artisan would require in assessing whether the polynucleotides embraced by Claim 37 encode a polypeptide that has glycine receptor activity (see Example 6). However, in the interest of facilitating prosecution, Applicants have cancelled Claim 37, as well as its dependent Claims 38, 39, and 40. The Examiners rejection of Claim 37, as well as its dependent Claims 38, 39, and 40, have been rendered moot in consideration of these claim cancellations. Moreover, Applicants believe the Examiners rejections of the remaining claims has also been rendered moot in consideration of these amendments and claim cancellations.

### **III. Rejections under 35 U.S.C. § 112, second paragraph**

a. The Examiner has rejected Claims 20 to 40 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. More particularly, the Examiner alleges that “The newly amended claim 20 recites the limitation of ‘wherein said encoded polypeptide has glycine receptor activity’. However, it is unclear what ‘glycine receptor activity’ is, and the specification does not define such, the metes and bounds of the claims, therefore, cannot be determined. Claim 37 is similarly indefinite”

Applicants disagree. However, in the sole interest of facilitating prosecution, Applicants have deleted Claim 20(e), and cancelled Claims 28, 29, 37, 38, 39, and 40. Applicants believe the Examiners rejection of these claims has been rendered moot in consideration of these deletions and claim cancellations. Moreover, since the remaining claims are dependent upon the amended and/or cancelled claims, Applicants believe the Examiners rejection of the remaining claims has also been rendered moot.


Applicants believe that all of the Examiners rejections and objections have been overcome and that all of the pending claims before the Examiner are in condition for allowance. An early Office Action to that effect is, therefore, earnestly solicited.

Applicants reply is timely filed and no extensions of time are required.

If any fee is due in connection herewith not already accounted for, please charge such fee to Deposit Account No. 19-3880 of the undersigned. Furthermore, if any extension of time not already accounted for is required, such extension is hereby petitioned for, and it is requested that any fee due for said extension be charged to the above-stated Deposit Account.

Respectfully submitted,

Bristol-Myers Squibb Company  
Patent Department  
P.O. Box 4000  
Princeton, NJ 08543-4000  
(609) 252-5289

  
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Stephen C. D'Amico  
Agent for Applicants  
Reg. No. 46,652

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